

What is claimed:

1. A composition for forming a thermally conductive polymeric material, comprising:
 - 5 a least one thermoplastic polymeric material;
 - a thermally conductive filler material; and
 - at least one solvent in which the at least one thermoplastic polymeric material is at least partially soluble.
- 10 2. The composition of claim 1, wherein the filler material is a fiber.
3. The composition of claim 2, wherein the fiber is a carbon fiber.
4. The composition of claim 1, wherein the composition includes at least
15 55 wt% of the filler material.
5. The composition of claim 1, wherein the composition includes at least 60 wt% of the filler material.
- 20 6. The composition of claim 1, wherein the composition includes at least 70 wt% of the filler material.
7. The composition of claim 1, wherein the composition further comprises a second thermally conductive filler material.
- 25 8. The composition of claim 7, wherein the second filler material is selected from boron nitride particles, Teflon fibers, Teflon particles and aluminum flakes.

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9. A thermally conductive polymeric material, comprising:
at least one polymeric material; and
at least 55 wt% of a thermally conductive filler material; and
- 5 10. The thermally conductive polymeric material of claim 9, wherein the thermally conductive filler material is a fiber.
11. The thermally conductive polymeric material of claim 10, wherein the fiber is a carbon fiber.
- 10 12. The thermally conductive polymeric material of claim 11, wherein the fiber length is at least about 200 μm .
13. The thermally conductive polymeric material of claim 9, further
15 comprising a second filler material.
14. The thermally conductive polymeric material of claim 13, wherein the second filler material is selected from boron nitride particles, Teflon fibers, Teflon particles and aluminum flakes.
- 20 15. The thermally conductive polymeric material of claim 9, comprising at least 60 wt% of the filler material.
16. The thermally conductive polymeric material of claim 10, comprising
25 at least 70 wt% of the filler material.
17. A method for forming a thermally conductive polymeric material, the method comprising the steps of:
forming a solution by at least partially dissolving a thermoplastic
30 polymeric material in a solvent;
adding a thermally conductive filler material to the solution; and
removing the solvent from the solution.

18. The method of claim 17, wherein the filler material is a fiber.
19. The method of claim 18, wherein the fiber is a carbon fiber.
- 5 20. The method of claim 18, wherein the length of the fiber before forming the solution is substantially the same as after removing the solvent from the solution.
- 10 21. The method of claim 17, wherein the filler material is added in an amount of at least about 55 wt%.
22. The method of claim 17, wherein the filler material is added in an amount of at least about 60 wt%.
- 15 23. The method of claim 17, wherein the filler material is added in an amount of at least about 70 wt%.
24. The method of claim 17, further comprising the step of adding a
- 20 second thermally conductive filler material to the solution.
25. A solvent blending method for forming a thermally conductive polymeric material by blending a thermally conductive fibrous filler with a polymeric material, wherein the length of the thermally conductive fibrous
- 25 filler after blending is substantially the same as the length of the thermally conductive fibrous filler after forming the thermally conductive polymeric material.
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26. A method for minimizing fiber breakage when forming a thermally conductive polymeric material comprising:
- forming a solution by at least partially dissolving a polymeric material in a solvent;
 - 5 adding a thermally conductive filler material to the solution, the thermally conductive filler material comprising fibers; and
 - removing the solvent from the solution.

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